





Summer 2020

Ontario's Feedlot Cattle Behavioral and Feed Bunk Management Study

Ontario Corn Fed Beef Program Objectives of This Study

Provide proven research information in a "show me" format to support Feed Industry Partners and Producers in making informed decisions to discuss, implement and apply the findings of this study to on farm production facilities. The ability to manage the "details" that each producer controls within their operations, presents multiple opportunities to maximize cattle performance.

"Maintain Consistency of Feed Intakes = Optimizing Feed Efficiency = Supporting Excellent Feedlot Animal Health"

Objectives:

- 1. Encourage producers to strive for consistency in the daily activities of their cattle feeding operations using good management practices
 - ➤ Develop a bunk score system for daily recording of the amount of feed fed and remaining in the bunk at the same time each day will indicate patterns/trends of Dry Matter (DM) intakes
 - Determine if ration moisture level is relatively consistent with previous feeding when in doubt consider using a microwave and gram scale - it's quick and easy (or work with a feed supplier)
 - Optimum ration moisture levels improve palatability, thereby increasing DM intake
 - Moisture levels of the ration can also influence sorting of the feed in the bunk
 - Aim to have feed delivered to the feed bunk the same time each day
 - Feed less more often this will reduce the stress level of the cattle coming to the bunk more calm visits to the feed bunk, less consumed each visit but encourages more visits, meaning more DM intake, thus increasing performance through better rumen health

Cleanout activities of the bedded area – strive to be the least disruptive as possible – timing after cattle are fed (allow 1 to 2 hrs. for cattle to be at bunk) – clean area close to feed bunk first - remember, when cattle are removed from the feed bunk and with fresh bedding, their daily routine is disrupted for longer than you may think!

2. Placement of new cattle on feed - incorporate a "new arrival" health protocol including a beginning step-up ration strategy leading up to the finishing ration phase

- ➤ Initial observation of cattle upon arrival determine what level of risk (High, Medium, Low) the cattle are in upon arrival, in terms of health and condition use this information to determine starter ration formula used
- Your management team consisting of a Veterinarian and a Feed Consultant should be contacted if any concerns are beyond your **predetermined** animal health and ration protocols
- ➤ Particle size is important in the ration the smaller the particle size the more risk to the animal's having a digestive upset. Manage length of fiber/roughage being too long can also create sorting in the bunk
- ➤ Gradual DM increases are extremely important cattle need to be staged to a consistent daily intake level before changing to next step-up ration or formula
- As mentioned above feed less more often encourage more bunk visits (Dairy Industry use feed pushers to encourage cattle to the feed bunk)
- ➤ Bunk scoring is critical in this time period be careful **not** to overfeed/ increase daily delivery aggressively as to **stall** the cattle no more than ½ lb./hd/day and hold for 2 to 3 days before next increase keep cattle leading/maintaining their DM intakes
- Remember the importance of water water should be fresh, readily available and easily accessible. Cattle need to be aware where their water source is- let bowls trickle over for a day or so. Hydrated cattle consume more DM.

The impact of feed bunk management; Excerpted from the 2020 Ohio Beef Nutrition & Management School



Dr. Francis Fluharty, former Ohio State University research nutritionist and current University of Georgia Department of Animal Sciences Chair



Dr Fluharty presentation link -https://www.youtube.com/watch?v=ZVu6r4peU8I

A screenshot of the swings in DM intake in 2 groups of steers on feed for the 1st 60 days in the feedlot.

Dr. Fluharty claims approximately 80% of the animals DM intake is used for Maintenance depending upon the energy density of the ration and genetics of the cattle. Growth/Performance is achieved with the remaining 20% DM intake. That equates to an animal eating 25 lbs. of DM would be using approx. 19-20 lbs. of DM for Maintenance, leaving approx. 5-6 lbs. of DM for Growth/Performance.... pay close attention to this number. This determines your profit margin – maintaining maximum DM intake is the goal.

Maintenance requirements will always be the priority of the animal, while Growth/Performance needs to be the priority of the feeder/ producer...that's what can be controlled with proper bunk management.

Note – in the above graph, the number of times the cattle crashed in Lot B- not consuming enough DM for just maintenance, not to mention growth development vs the consistent DM intakes in Lot A, demonstrating proper bunk management.

- Dr Fluharty's presentation provides further support for the data collected and compiled for our Ontario Study of 2020

Take home message – 25 % of the ration DM you place in the bunk each day represents the growth potential of the animal. You control the DM intake of the animal with proper bunk management each day - you control the performance of the animals on your farm.